UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,128	09/30/2003	Rudolf Engl	1825.003US1	3900

42983 7590 10/13/2010
ROCKWELL AUTOMATION, INC./(SLWK)
ATTENTION: SUSAN M. DONAHUE, E-7F19
1201 SOUTH SECOND STREET
MILWAUKEE, WI 53204

EXAMINER	
GAMI, TEJAL	

ART UNIT	PAPER NUMBER
2121	

MAIL DATE	DELIVERY MODE
10/13/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	**Application No.** 10/677,128	**Applicant(s)** ENGL ET AL.	
	Examiner TEJAL J. GAMI	**Art Unit** 2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _25 June 2010_.
2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-6,17-20 and 26-33_ is/are pending in the application.
  4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) _1-6,17-20 and 26-33_ is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  a)☐ All b)☐ Some * c)☐ None of:
    1.☐ Certified copies of the priority documents have been received.
    2.☐ Certified copies of the priority documents have been received in Application No. _____.
    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
  Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is responsive to a REQUEST IN CONTINUED EXAMINATION entered June 25, 2010 for patent application 10/677128.

Status of Claims

2. Claims 1-6, 17-20, and 26-33 were rejected in the last Office Action dated March 26, 2010.

As a response to the March 26 2010 office action, Applicant has Amended claims 1, 17, 30, and 33.

Claims 1-6, 17-20, and 26-33 are now presented for examination in this office action.

Examiner Notes

3. Prior art is presented by reading the claims in light of the specification. However, essential limitations such as, “light curtain” access port, are missing from the claims. In other words, the claims as written are extremely broad.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-6, 17-20, 26-33 are rejected under 35 U.S.C. 102(b) as being anticipated by “MiniSafe MS4600 Series Safety Light Curtain,” MiniSafe MS4600 Installation and Operating Manual, (07/08/1999), pages 1-39.

As to independent claim 1, MiniSafe discloses an apparatus comprising:

a housing assembly including an access port therein (e.g., access to configuration switches 3) (see Figure F-1 on Page 39; and Page 4);

programmable controls coupled with the housing assembly (e.g., program button 4) (see Figure F-1 on Page 39; and Page 4);

a teaching actuator (e.g., switch settings) operatively coupled with the programmable controls (e.g., programming exact channel select) (see Page 10); and

an access member (e.g., machine primary control element MPCE monitoring) coupled with a portion of the housing assembly (e.g., MiniSafe) (see Page 11), the access member having both a closed position (e.g., CLOSED) and an open position (e.g., OPEN) (see Page 11) while coupled with the portion of the housing assembly (e.g., MiniSafe) (see Page 39), the access member (e.g., MPCE) (see Page 11) preventing physical access (e.g., protected machine) (see Page 5 for Machine Stop and Fault; and Page 5 second paragraph for “personnel protection”) to the programmable controls and the teaching actuator (e.g., switch positions/operating mode; Output Signal Switching Device OSSD) (see Page 7 Table 4-1; and Page 11) through the access port (see Figure F-1 on Page 39; and Page 4) when the access member is disposed in the closed position (e.g., OFF state; CLOSED) (see Page 5 for Machine Stop and Fault; and Page 11 for 6.3 Machine Primary Control Element MCPE Monitoring).

As to independent claim 17, MiniSafe discloses an apparatus comprising:

a housing assembly (e.g., MiniSafe) including an access port therein (e.g., access to configuration switches 3) (see Figure F-1 on Page 39; and Page 4);

programmable controls coupled with the housing assembly (e.g., program button 4) (see Figure F-1 on Page 39; and Page 4);

a teaching actuator (e.g., switch settings) operatively coupled with the programmable controls (e.g., programming exact channel select) (see Page 10);

an access member (e.g., machine primary control element MPCE monitoring) coupled with a portion of the housing assembly (e.g., MiniSafe) (see Page 11), the access member (e.g., MPCE) (see Page 11) preventing physical access (e.g., protected machine) (see Page 5 for Machine Stop and Fault; and Page 5 second paragraph for "personnel protection") to the programmable controls through the access port (e.g., access to configuration switches 3) (see Figure F-1 on Page 39; and Page 4) and the teaching actuator (e.g., Output Signal Switching Device OSSD) (see Page 11) when the access member is disposed in a closed position (e.g., OFF state; CLOSED) (see Page 5 for Machine Stop and Fault; and Page 11 for 6.3 Machine Primary Control Element MCPE Monitoring), and the access member (e.g., MPCE) (see Page 11) prevents unauthorized physical access to the programmable controls (e.g., the protected machine is not allowed to operate; regardless of button press and release) (see Page 5 for Machine Stop and Fault).

As to dependent claim 2, MiniSafe teaches the apparatus as recited in claim 1, further comprising a fastener (e.g., guarded machine) (see Page 21 note 2) coupled with the access member (e.g., machine primary control element MPCE monitoring) (see Page 11), wherein the fastener prevents unauthorized access to the programmable controls (e.g., the protected machine is not allowed to operate; regardless of button press and release) (see Page 5 for Machine Stop and Fault).

As to dependent claim 3, MiniSafe teaches the apparatus as recited in claim 1, wherein the access member is disposed on a transmitting side of the housing assembly (e.g., transmitter 11) (see Figure F-1 on Page 39).

As to dependent claim 4, MiniSafe teaches the apparatus as recited in claim 1, wherein the programmable controls comprise dip switches (e.g., switch settings) (see Page 10).

As to dependent claim 5, MiniSafe teaches the apparatus as recited in claim 1, further comprising one or more visual indicators (e.g., status 12) (see Figure F-1 on Page 39; and Page 4).

As to dependent claim 6, MiniSafe teaches the apparatus as recited in claim 5, wherein the teaching actuator is released in a predetermined amount of time after cessation of visual indication of the visual indicators (e.g., operator must press and release the START button; Ts=the stop time of the press in seconds) (see Page 6 Start Interlock; and Page 13 for Ts), and programming of the programmable controls is implemented (e.g., programming exact channel select) (see Page 6 Start Interlock; and Page 10).

As to dependent claim 18, MiniSafe teaches the apparatus as recited in claim 17, further comprising a means for preventing unauthorized programming of the programmable controls (e.g., the protected machine is not allowed to operate; regardless of button press and release) (see Page 5 for Machine Stop and Fault).

As to dependent claim 19, MiniSafe teaches the apparatus as recited in claim 17, further comprising one or more visual indicators (e.g., status 12) (see Figure F-1 on Page 39; and Page 4).

As to dependent claim 20, MiniSafe teaches the apparatus as recited in claim 19, wherein the teaching actuator is released in a predetermined amount of time after cessation of visual indication of the visual indicators (e.g., operator must press and release the START button; Ts=the stop time of the press in seconds) (see Page 6 Start Interlock; and Page 13 for Ts), and programming of the programmable controls is implemented (e.g., programming exact channel select) (see Page 6 Start Interlock; and Page 10).

As to dependent claim 26, MiniSafe teaches the apparatus as recited in claim 17, further comprising dip switches (e.g., Switches A and B) (see Table on Page 7 and Figure on Page 39).

As to dependent claim 27, MiniSafe teaches the apparatus as recited in claim 17, further comprising one or more sealing features (e.g., end cap) between the access member (e.g., access to configuration switches 3) and the housing assembly (e.g., MiniSafe) (see Figure F-1 on Page 39; and Page 4).

As to dependent claim 28, MiniSafe teaches the apparatus as recited in claim 17, further comprising a sensor configured to sense whether the access member is in the closed position or in an access position (e.g., OFF state; CLOSED) (see Page 5 for Machine Stop and Fault; and Page 11 for 6.3 Machine Primary Control Element MCPE Monitoring).

As to dependent claim 29, MiniSafe teaches the apparatus as recited in claim 17, further comprising a fastener that prevents the access member from being opened (e.g., tamper-resistant screw) (see Page 10 for Note! The PROGRAM button is accessed by removing a tamper-resistant screw).

As to dependent claim 30, MiniSafe teaches the apparatus as recited in claim 19, wherein the one or more visual indicators indicate when the teaching actuator is actuated (e.g., operating states) (see Page 5-6).

As to dependent claim 31, MiniSafe teaches the apparatus as recited in claim 1, further comprising one or more sealing features (e.g., end cap) between the access member (e.g., access to configuration switches 3) and the housing assembly (e.g., MiniSafe) (see Figure F-1 on Page 39; and Page 4).

As to dependent claim 32, MiniSafe teaches the apparatus as recited in claim 1, further comprising a sensor configured to sense whether the access member is in the closed position or in an access position (e.g., OFF state; CLOSED) (see Page 5 for Machine Stop and Fault; and Page 11 for 6.3 Machine Primary Control Element MCPE Monitoring).

As to dependent claim 33, MiniSafe teaches the apparatus as recited in claim 5, wherein the one or more visual indicators indicate when the teaching actuator is actuated (e.g., operating states) (see Page 5-6).

Response to Arguments

6. Applicant's amendments and arguments filed June 25, 2010 have been fully considered. The amendment does not overcome the original art rejection and the arguments are not persuasive. The following are the Examiner's observations in regard thereto.

Applicant Argues:

As indicated on the referenced page 11 of MiniSafe:, MPCE "monitors the MiniSafe interface to the guarded machine and checks to ensure that the control elements are responding correctly to the light," which does not disclose an access member to prevent physical access to programmable controls and a teaching actuator.

Examiner Responds:

Examiner is not persuaded. See office action above for prior art disclosure of preventing physical access (e.g., protected machine) (see Page 5 for Machine Stop and Fault; and Page 5 second paragraph for "personnel protection") and a teaching actuator operatively coupled with programmable controls (e.g., operating modes of switch positions) (see Page 7 Table 4-1), as claimed.

The prior art teaches many examples of an access member. Here is another example, in addition to the office action above:

an access member (e.g., inside receiver end cap 10) coupled with a portion of the housing assembly (e.g., MiniSafe) (see Page 4 and 39), the access member having both a closed position and an open position (e.g., inside receiver end cap 10) while coupled with the portion of the housing assembly (e.g., MiniSafe) (see Page 4 and 39), the access member preventing physical access (e.g., inside receiver end cap 10) (see Page 4 and 39) to the programmable controls (e.g., program button must remove security screw) (see Page 4, 10, and 39) and the teaching actuator (e.g., switches A and B) (see Page 10 and 39) through the access port (e.g., access to configuration switches 3) (see Figure F-1 on Page 39; Page 4; and Page 5 for "configuration switches in the removable cap on the bottom of the receiver") when the access member is disposed in the closed position (e.g., inside receiver end cap 10) (see Page 4 and 39).

Under such considerations, the prior art anticipates an access member to prevent physical access to programmable controls and a teaching actuator.

Applicant Argues:

An "operator must press and release the Start button" does not disclose or suggest a teaching actuator is released in a predetermined amount of time after cessation of visual indication of the visual indicators.

Examiner Responds:

Examiner is not persuaded. See office action above for clarification of prior art anticipation of claimed limitations. For example, see Page 6 Start Interlock for operator must press and release the start button, and Page 13 for Ts=the stop time of the press in seconds. Under such considerations, the prior art teaches a teaching actuator released in a predetermined amount of time after cessation of visual indication of the visual indicators, as claimed.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tejal J. Gami whose telephone number is (571) 270-1035. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ALBERT DECADY/
Supervisory Patent Examiner, Art Unit 2121

/TJG/